



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,417	08/24/2004	Hiroshi Kaneta	8017-1141	7384
466 7590 04/08/2008 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER LEE, CYNTHIA K	
			ART UNIT 1795	PAPER NUMBER
			MAIL DATE 04/08/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/505,417

Applicant(s)

KANETA ET AL.

Examiner

CYNTHIA LEE

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5-8 and 11-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-8 and 11-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

This Office Action is responsive to the amendment filed 1/9/2008. Claim 1 has been canceled. Claims 2,3, 5-8, 11-21 are pending. Applicant's arguments have been considered and are persuasive. Upon further consideration, the instant claims are rejected under new grounds of rejections. Claims 2, 3, 5-8, 11-21 are finally rejected for reasons stated herein below.

The 35 USC 112, 1st and 2nd paragraph rejections have been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 5-8, 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanai (US 6458485) in view of McMahan (US 6002240) and Shibuya (US 2002/0034678).

Refer to fig. 1 and 4. Yanai discloses a secondary battery comprising:
an electric-power generating element provided with positive and negative electrode collectors (42), each of said collectors having a respective uncoated area that is free of active material;

positive and negative electrode terminals for charge and discharge and that are attached to said uncoated areas of said positive and negative electrode collectors, respectively (3 in fig. 1 and 2:40-45); and

Yanai discloses a PTC that is attached directly to said uncoated area of one of said positive and negative electrode collectors and that does not directly contact either of said positive and negative electrode terminals, but not a third terminal attached directly to said uncoated area of one of said positive and negative electrode collectors and that does not directly contact either of said positive and negative electrode terminals and located at different positions (Applicant's claim 21). McMahan teaches a temperature monitoring circuit coupled to a controller. The temperature monitoring circuit may be a thermistor whose resistance depends on the temperature (4:63-65). The temperature monitoring circuit is coupled to the controller and measures a temperature of the battery (4:33-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the PTC element of Yanai to a controller, as taught by McMahan, for the benefit of being able to monitor the temperature of the battery of Yanai. When the PTC element of Yanai is connected to a controller, the PTC element extended from the interior of the battery to the controller located exterior of the battery would necessarily read on Applicant's "third tab."

Yanai modified by McMahan would have wherein said third terminal has a same electric potential as said respective one of said positive and negative electrode terminals and said third terminal is attached electrically conductive to said uncoated area of said one of said positive and negative electrode collectors (Applicant's claim 21).

Yanai discloses a cylindrical battery, but does not disclose a flat battery (Applicant's claim 21) with laminate casing (Applicant's claim 7). Shibuya discloses a

flat battery (fig. 5) with laminate casing [0085]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the battery of Yanai as a flat battery depending on the shape and size requirements of the intended application. The courts have held that changes in shape are a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed invention was significant. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). See MPEP 2144.04. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a laminate casing instead of a cylindrical battery can for the benefit of a light weight battery to give a higher energy density.

Takatani does not disclose that the third terminal is formed in a different direction or in a perpendicular direction as the positive and negative electrodes, or remote from terminals for charge and discharge (applicant's claims 2, 3, and 15). However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the location or the direction of the terminals to suit the electrical connection requirements and space requirements for the intended application.

Takatani discloses one third terminal and not two third terminals (applicant's claim 18 and 19). However, It would have been obvious to one of ordinary skill in the art at the time the invention was made to add more terminals for the benefit of being able to detect the battery temperature from various points of the battery. Further, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Takatani discloses a battery but does not disclose a plurality of said battery connected serially to each other (applicant's claims 8 and 20). However, the Examiner notes that it is common practice in the art to connect a plurality of batteries either in series or parallel to increase the voltage or the current depending on the power requirements of the intended application of the battery. It would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the battery of Takatani in series or parallel for the benefit of meeting the power requirements of the intended application.

Response to Arguments

Applicant's arguments with respect to prior art Takatani have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1795

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Lee whose telephone number is 571-272-8699. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ckl

/PATRICK RYAN/
Supervisory Patent Examiner, Art Unit 1795

